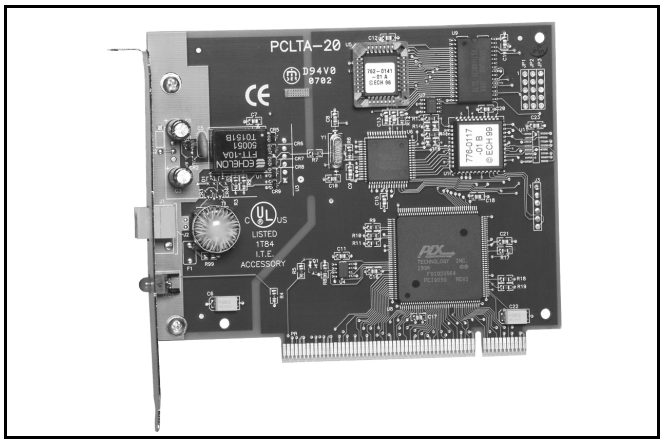
Honeywell

Q7751C,H
LONTALK® Adapters

SPECIFICATION DATA



FEATURES

- **32-bit PCI adapter card for LONWORKS® networks.**
- **Plug-and-play capability with Microsoft® Windows® 98/2000 and Windows XP®.**
- **Downloadable firmware allows updates without accessing or changing hardware.**
- **Integral FTT-10A, RS-485, TPT/XF-78, or TPT/XF-1250 transceiver, and custom transceivers.**
- **LNS® network services interface (NSI) supports LNS applications.**
- **CE Mark, U.L. Listed, cU.L. Listed.**
- **Network driver for Windows 98/2000 and Windows XP available.**

DESCRIPTION

The Q7751C,H LONTALK® Adapters are high-performance LONWORKS® interfaces for personal computers equipped with a 32-bit Peripheral Component Interconnect (PCI) interface and a compatible operating system. Designed for use in LONWORKS control networks that require a PC to monitor, manage, or diagnose the network, the adapters are ideal for industrial control, building automation, and process control applications. The adapters feature an integral twisted pair transceiver interface, downloadable memory, a network management interface, and plug-and-play capability with Microsoft® Windows® 98/2000 and Windows XP.

The adapter provides both LNS® network services interface (NSI) functionality for use with LNS tools, and Microprocessor Interface Program (MIP)-compatible network interface functionality for use with LonManager® API-based tools.

Installation software for the adapter is provided with the LonMaker™ Integration Tool, LNS DDE Server, and LNS Application Kit software distributions, or may be downloaded from the developer's tool box section of the Echelon web site. It includes a software-based control panel and a software driver for Microsoft Windows 98/2000 and Windows XP. The control panel provides a convenient means of setting and modifying installation parameters, diagnosing card operation, and displaying error messages. The adapter supports plug-and-play operation, simplifying installation.

The LNS network operating system allows any number of installation, maintenance, monitoring, and control devices to exist in a system and to adapt to network configuration changes automatically. Users can reconfigure the system from any user interface device anywhere on the network and ensure that all monitoring and control stations are always up-to-date with respect to the system's configuration. When used with the appropriate software, the LNS network services interface (NSI) functionality of the adapter allows the attached host to run LNS applications.

In both NSI mode and MIP modes, the adapter also permits the host PC to act as an LONWORKS application device, running application-specific programs while the adapter handles lower layer functions such as media access control, collision avoidance, message validation, authentication, and priority processing. The host application, including its network variables, can be changed at any time without modifying the adapter. The adapter combined with the host PC can also be used with applications that require more processing power, memory, input/output capability, or network variable connections than are provided by the Neuron® Chip alone.

Firmware for the adapter is downloaded from the host PC. This allows the adapter to be updated as new versions of the software and firmware are released, without modifying or physically accessing the adapter. This feature extends the useful service life of the adapter, and minimizes the cost and time associated with software and firmware updates.

® U.S. Registered Trademark
© 2005 Honeywell International Inc.
All Rights Reserved

CE c UL US LISTED

SPECIFICATIONS

Models: Q7751C,H LonTalk® Adapter.

Dimensions (excluding card edge fingers):
3-7/8 in. (98 mm) H x 5-3/16 in. (132 mm) L.

Ambient Ratings:
Temperature:
Operating: 32° to 158°F (0° to +70°C.)
Storage: -49° to +185°F (-45° to +85°C.)
Humidity (non-condensing):
Operating: 25 to 90% RH at 122°F (50°C).
Non-operating (12 hour): 95% RH at 122°F (50°C).

Processor: Neuron 3150® Chip.

Processor Input Clock: 10 MHz.

Memory: 58K bytes SRAM.

Twisted Pair Network Connector:
Weidmüller 2-conductor BLA.

Operating Input Voltage:
Q7751C,H: +5 Vdc ±5%.
Q7751H: +3.3 Vdc ±5%.

Operating Input Current: 300 mA typical, 1A maximum.

PC Bus Interface: 32-bit PCI.

Indicator: Service LED.

Neuron Chip Service Pin Function:
Service pin message controlled by host application.

Configuration State: Displayed on host.

EMI:
FCC Part 15 Level B and EN55022 Level B.
CE Immunity EN50082-1:1997.
EN61000-4-2: 8K air discharge, 4K contact discharge.
EN61000-4-3: 3 V/m.
EN61000-4-4: 1K V power, 0.5K V I/0.
EN61000-4-5: 2K V common mode, 1K V differential mode.
EN61000-4-6: 3V rms.
EN61000-4-8: 1 A/m.
EN61000-4-11: 30%, 60%, and >95%.
ENV50240 (900MHz Key): 3 V/m.

Approvals:
Underwriter's Laboratories, Inc. UL 1950.
cUL per CSA C22-2 No. 950.

Documentation:
The LonWorks PCLTA-20 PC LonTalk User's Guide can be downloaded from Echelon's web site or may be ordered from Echelon's literature fulfillment department.

Document Echelon Part Number:
Q7751C: LonWorks PCLTA-20 PC LonTalk User's Guide 078-0179-01.
Q7751H: LonWorks PCLTA-21 PC LonTalk User's Guide 078-0271-01.

Echelon, LON®, Lon Manager, LonWorks®, LonTalk, LNS, Neuron, and 3150 are registered trademarks of Echelon® Corporation.

LonMaker is a trademark of Echelon Corporation.

Microsoft, Windows, and Windows NT are registered trademarks of Microsoft Corporation.

Honeywell

Automation and Control Solutions
Honeywell International Inc.
1985 Douglas Drive North
Golden Valley, MN 55422

Honeywell Limited-Honeywell Limitée
35 Dynamic Drive
Scarborough, Ontario
M1V 4Z9

By using this Honeywell literature, you agree that Honeywell will have no liability for any damages arising out of your use or modification to, the literature. You will defend and indemnify Honeywell, its affiliates and subsidiaries, from and against any liability, cost, or damages, including attorneys' fees, arising out of, or resulting from, any modification to the literature by you.

Printed in U.S.A. on recycled paper containing at least 10% post-consumer paper fibers.